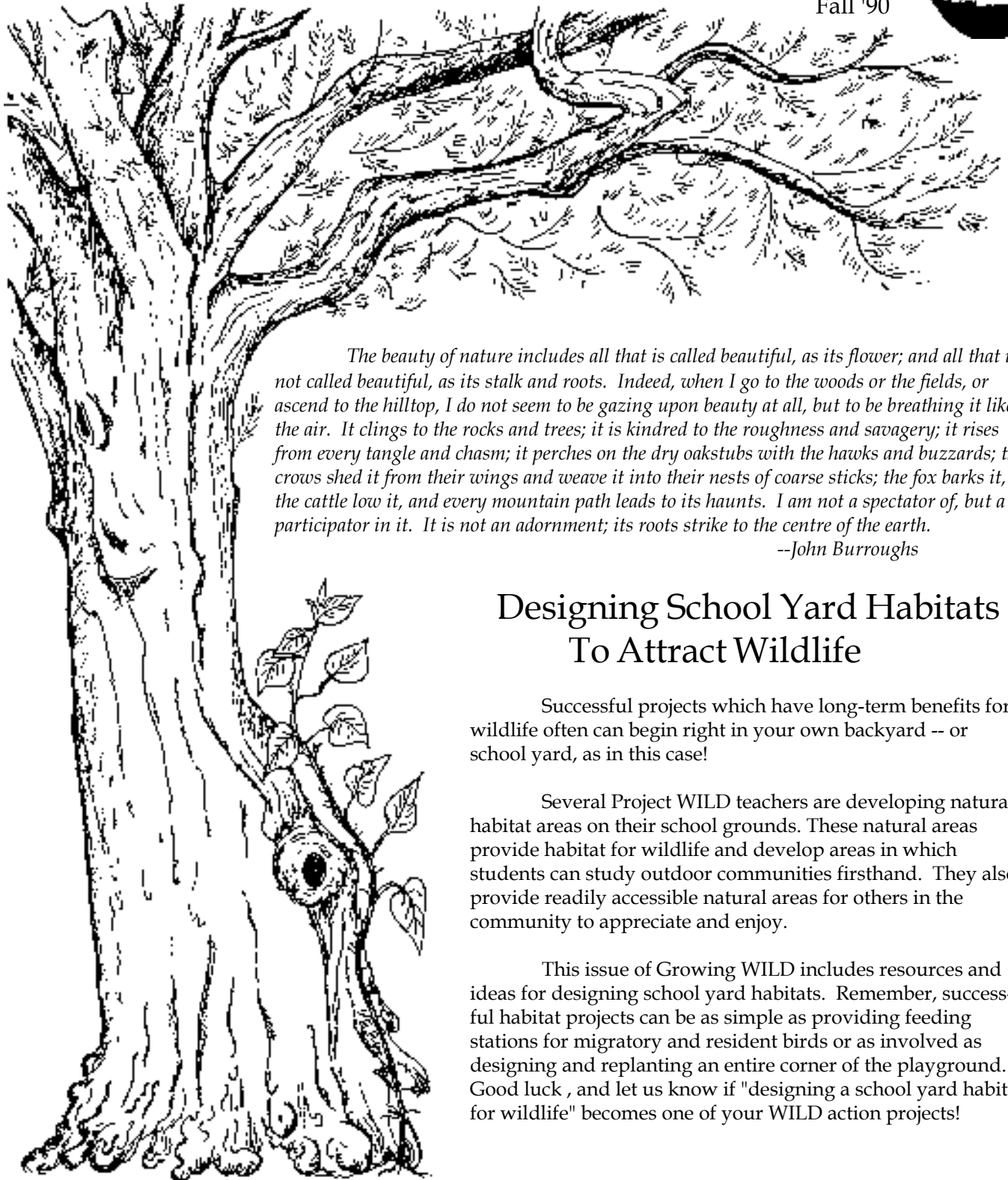


Growing WILD

Utah's Project WILD Newsletter



Fall '90



The beauty of nature includes all that is called beautiful, as its flower; and all that is not called beautiful, as its stalk and roots. Indeed, when I go to the woods or the fields, or ascend to the hilltop, I do not seem to be gazing upon beauty at all, but to be breathing it like the air. It clings to the rocks and trees; it is kindred to the roughness and savagery; it rises from every tangle and chasm; it perches on the dry oakstubs with the hawks and buzzards; the crows shed it from their wings and weave it into their nests of coarse sticks; the fox barks it, the cattle low it, and every mountain path leads to its haunts. I am not a spectator of, but a participator in it. It is not an adornment; its roots strike to the centre of the earth.

--John Burroughs

Designing School Yard Habitats To Attract Wildlife

Successful projects which have long-term benefits for wildlife often can begin right in your own backyard -- or school yard, as in this case!

Several Project WILD teachers are developing natural habitat areas on their school grounds. These natural areas provide habitat for wildlife and develop areas in which students can study outdoor communities firsthand. They also provide readily accessible natural areas for others in the community to appreciate and enjoy.

This issue of Growing WILD includes resources and ideas for designing school yard habitats. Remember, successful habitat projects can be as simple as providing feeding stations for migratory and resident birds or as involved as designing and replanting an entire corner of the playground. Good luck, and let us know if "designing a school yard habitat for wildlife" becomes one of your WILD action projects!

"Landscaping for Wildlife"

This new publication from the Nongame Section of Utah's Division of Wildlife Resources will be available free of charge after January, 1991. Copies may be picked up at DWR Offices or requested by mail by sending \$.50 postage fee to Vicki Unander, Librarian, Division of Wildlife Resources, 1596 West North Temple, Salt Lake City, UT 84116.

Natural areas planted on small parcels of your school grounds can attract native wildlife species for both study and enjoyment. "Landscaping for Wildlife" offers you a step-by-step guide for effectively designing these natural areas whether you live in the southern Utah desert country, in the farming valleys, Utah's urban areas, or near the Wasatch or Uinta Mountains.

"Landscaping for Wildlife" is divided into three major sections with a bibliography section in the back for further reference:

Part I describes the basic components of habitat and describes the four main climatic and geographic regions of the state;

Part II is a step-by-step guide to creating your wildlife habitat, from analyzing the existing conditions in your area to selecting recommended native plants for each of the four regions;

Part III focuses on the possible wildlife species attracted to your natural area, including birds, butterflies and moths, bees, mammals, reptiles and amphibians.

Natural areas on school grounds help to replace valuable habitat that has been lost as our growing population expands into wildlife areas. Many Project WILD activities stress the importance of habitat and are easily found in the Topic Index of each Project WILD Activity Guide. Other activities such as CAN DO! (Elementary - page 223; Secondary - page 201), IMPROVING WILDLIFE HABITAT IN THE COMMUNITY (Elementary - page 225; Secondary - page 131), and ENVIRO-ETHICS (Elementary - page 227; Secondary - page 41) may be used to introduce the idea of habitat development to your classes.

NWF Sponsors Backyard Wildlife Habitat Program

According to the National Wildlife Foundation (NWF), "Inviting wildlife to your backyard is probably the best way for children to learn a simple tenet of ecology: life operates in one large system and everything in that system is interconnected; any change in one part affects the rest of the system." The NWF invites you to plan a wildlife habitat for your backyard or school yard and certify it through their Backyard Wildlife Habitat Program. You can work with as large an area as is available or, as NWF points out, even a window box can become a "wildlife refuge-in-miniature."

For information on how you can create such a habitat and an application for its certification, write: Backyard Wildlife Habitat Program, National Wildlife Federation, 1400 16th Street N.W., Washington, D.C. 20036. In addition, the Project WILD Office has a limited supply of "Invite Wildlife to Your Backyard," a reprint of an article published by the NWF. Give us a call (801 538-4719) if you would like a copy.

School's Bird Refuge Becomes Natural Classroom

The students at Lowell Elementary School in Salt Lake City are eager to continue work on their new Bird Refuge. It is to be located on the previously unused slope on the north side of the school grounds. Proposed by members of the Lowell Student Council last spring, this project has received enthusiastic support from students, teachers and district personnel.

Environmental education has been an integral part of Lowell's science curriculum for the past several years. Now, the new Bird Refuge will provide a readily accessible study area. Classes in all areas of natural science will be held there. Not only will this area attract birds and other wildlife, but the trees, bushes, grasses and flowers will be native Utah species and will serve as a mini-arboretum. The pond and waterfall will provide opportunities for students to study pond life.

Already the Student Council has researched the kinds of birds most likely to be attracted to this area. Students have worked with consultants from the Division of Wildlife Resources, Utah Native Plant Society and Tracy Aviary. Salt Lake City School District's Grounds Supervisor Karen Mesh has developed a detailed master plan from plans drawn by Lowell students. Students have organized an Adopt-A-Tree Fund and are in the process of analyzing and preparing the soil and selecting plants.

Everyone involved, from students to district administrators, is ready to work to make Lowell's Bird Refuge a reality as soon as possible! If you're interested in creating a bird refuge at your school and you would like more information, contact Meg Brady, member of the Lowell School Community Council, at 801 533-9756. Project WILD applauds Lowell School for its continuing commitment to the environment!

Project WILD thanks Meg Brady and Sara Wikstrom, sixth grade student at Lowell, for contributing information for this article.



Utah's Habitat Trail Grows Out-of-State

In the fall of 1988, we reported on a habitat project begun the previous year at Sally Mauro Elementary School in Helper, Utah. Plans were to transform one acre of school yard into a natural area for native plants and animals. Now beginning its third year of development, the Habitat Awareness Trail continues its steady progress with the help of Mauro's students in grades 3 through 6. Lynda Varner, Project WILD teacher coordinating this project, reports that this past dry summer required that they do some supplemental watering, but the pond is now almost finished, and this fall they will plant bulbs of native plants, such as sego lilies.

Lynda's habitat project was also recently featured in *Science and Children* magazine (March 1990) in the "In Your Schools" section. As a result of this article, Lynda has received an inquiry from a teacher in the Amherst School District in New York who is interested in implementing a similar project through their Gifted and Talented Program. The Amherst District is eager to initiate habitat projects at several schools, and Lynda is eager to share with them whatever they need to get the project started!

We congratulate Lynda for her dedication to a project which began as an outgrowth of the Project WILD activity CAN DO! and which is proving to have both long-term and far-reaching benefits!

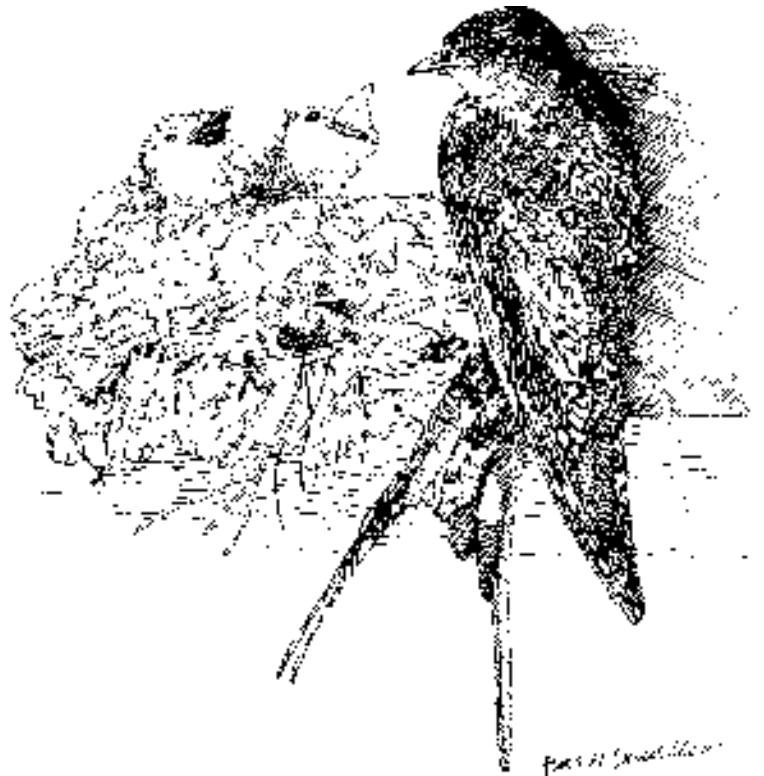
When the bird and the book disagree, always believe the bird!

--Birdwatcher's Proverb from Listening to Nature by Joseph Cornell

Providing feeding stations for wild birds can become a successful habitat project when you are careful to consider the habitat needs of the different species you wish to attract. One of the best resources available right now in Utah is the leaflet prepared by the Nongame Section of Utah's Division of Wildlife Resources entitled, "Feeding Utah's Birds." You may ask for a free copy from the Project WILD Office, 1596 West North Temple, Salt Lake City, UT 84116 (538-4720).

"Feeding Utah's Birds" describes how different bird species have specialized habitat needs and how each species has physical and behavioral traits which enable it to find particular foods efficiently. Ideas are given for observing birds at your feeders, and detailed descriptions are given for feeders best suited for attracting a variety of birds. "Feeding Utah's Birds" lists food preferences of different species and describes the birds which are commonly seen in winter and summer. The Project WILD Office also has directions for making bird feeders from 2-litre plastic soft drink bottles (a great recycling opportunity!).

"Feeding Utah's Birds" would be a valuable resource when beginning a habitat development project on school grounds. For more information about feeding birds, refer to "Landscaping For Wildlife" (see page 2 of this issue of *Growing WILD*) for creating natural areas with plants providing food and cover.



"Woodworking for Wildlife"

Another possibility for attracting birds is to provide nesting boxes for species known to nest in your area. A booklet provided by the Minnesota Department of Natural Resources contains plans for nest boxes and platforms for 40 different species of birds and small mammals and is available from the Project WILD Office, 1596 West North Temple, Salt Lake City, UT 84116 (801 538-4719).

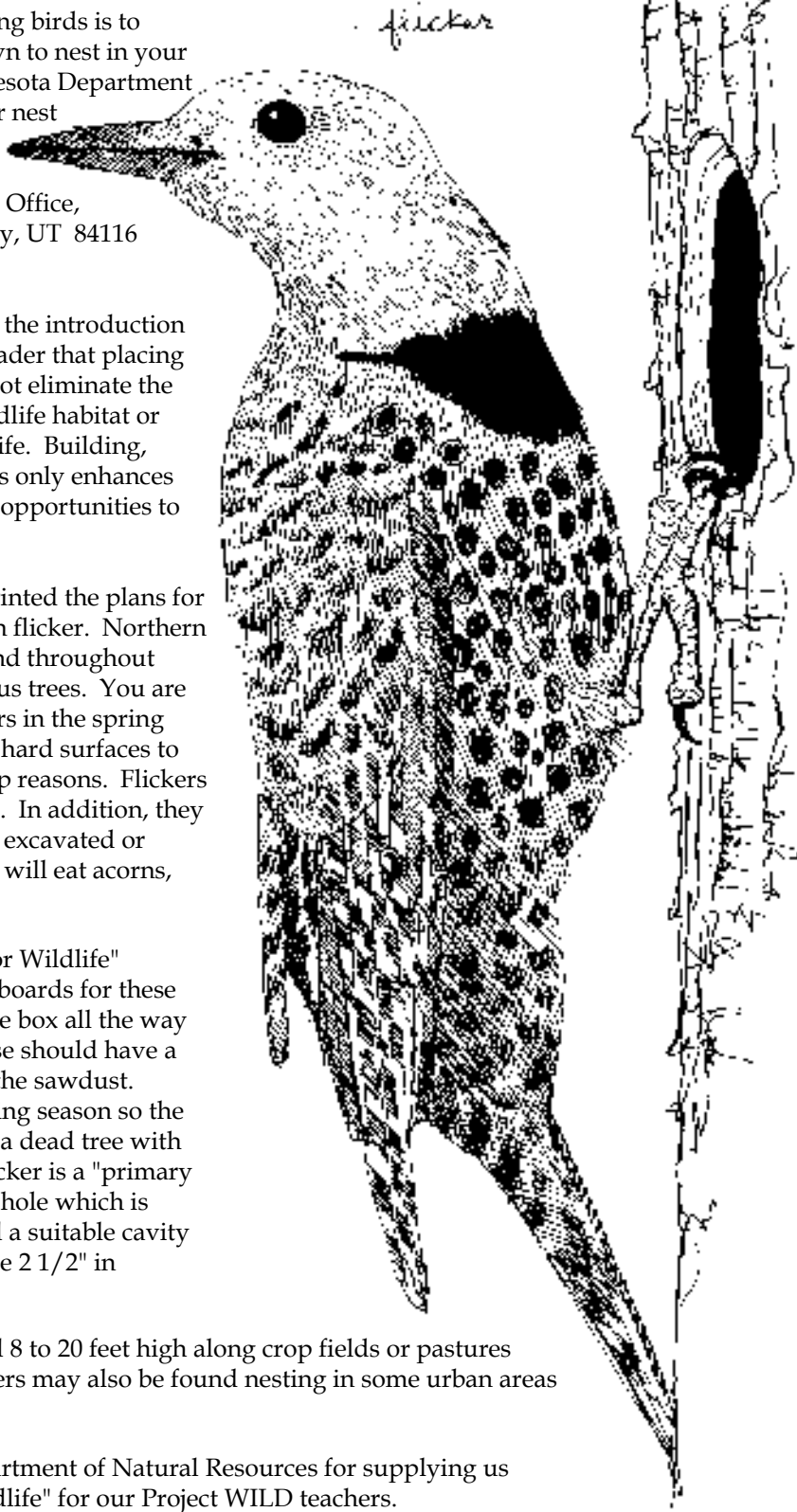
An important note included in the introduction to this practical booklet reminds the reader that placing and maintaining nest structures does not eliminate the need for preserving and managing wildlife habitat or preserving snags (dead trees) for wildlife. Building, placing and maintaining nest structures only enhances existing habitat and provides personal opportunities to see and enjoy wildlife.

On the next page we have reprinted the plans for constructing the nest box for a northern flicker. Northern flickers are common woodpeckers found throughout Utah in mixed deciduous and coniferous trees. You are often first aware of nearby woodpeckers in the spring when they tap loudly on trees or other hard surfaces to communicate for territorial or courtship reasons. Flickers often forage on the ground, eating ants. In addition, they feed on insects and other invertebrates excavated or gleaned from trees. Occasionally, they will eat acorns, nuts, berries and fruit.

The booklet "Woodworking for Wildlife" recommends using 1 1/2" thick cedar boards for these nest boxes and filling the interior of the box all the way up to the top with sawdust. This house should have a hinged roof to facilitate filling it with the sawdust. Tamp down the sawdust prior to nesting season so the box is ready. The filled box simulates a dead tree with soft heartwood. Since the northern flicker is a "primary excavator," it will start at the entrance hole which is provided and throw out sawdust until a suitable cavity is created. The entrance hole should be 2 1/2" in diameter.

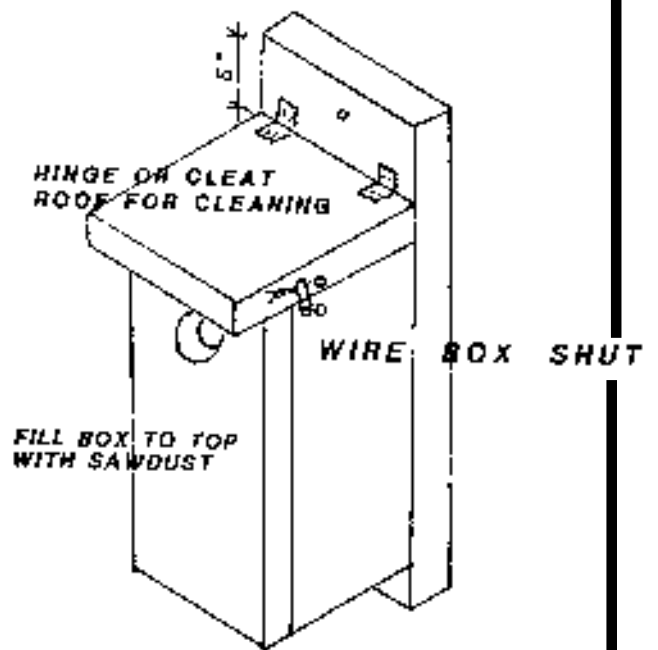
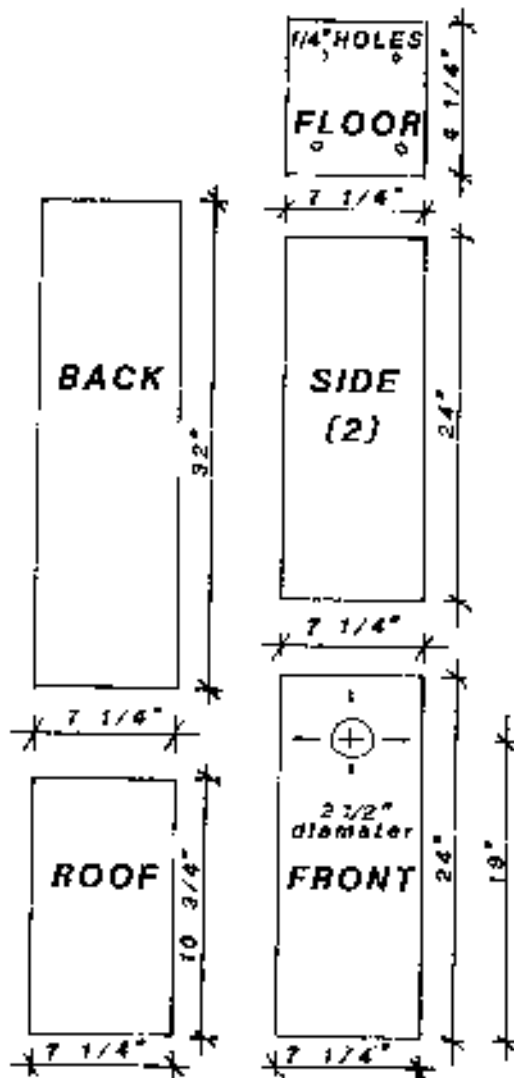
Flicker boxes should be placed 8 to 20 feet high along crop fields or pastures or in orchards or wooded areas. Flickers may also be found nesting in some urban areas where adequate cover is provided.

We thank the Minnesota Department of Natural Resources for supplying us with copies of "Woodworking for Wildlife" for our Project WILD teachers.

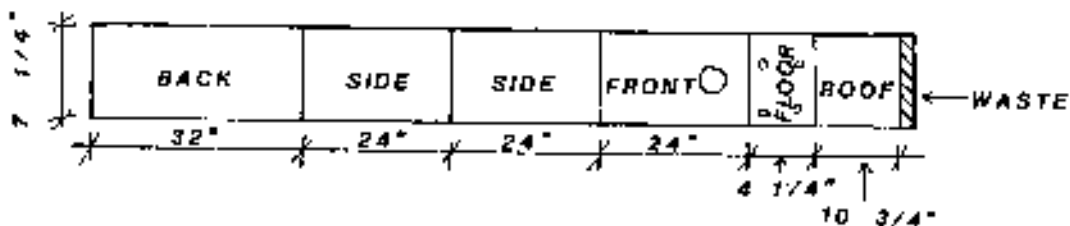


Northern Flicker Nest Box

(from "Woodworking for Wildlife," Minnesota Department of Natural Resources)



LUMBER: ONE 2"x8"x12'0"



Biologists in the Utah Division of Wildlife Resources are interested in your success with this project. Please let us know in the Project WILD Office if you have flickers using your nesting boxes next spring.

I Am Phoenix

by Paul Fleischman (a book of poems for two voices)

As explained by author Paul Fleischman, poems for two voices are written to be read aloud by two readers at once, one taking the left-hand part, the other taking the right-hand part. The poems should be read from top to bottom, the two parts meshing as in a duet. When both readers have lines at the same horizontal level, those lines are to be spoken simultaneously. Paul Fleischman has written two books of poems for two voices: *I Am Phoenix*, a book of poems about birds; and *Joyful Noise*, a collection of poems about insects.

Poems for two voices are ideal for ANIMAL POETRY and other WILD activities which involve writing as a form of expression. Laura Copeland, a Project WILD teacher working with 7th grade English students, taught MIGRATION HEADACHE and focused on the importance of marshlands and the wildlife found there. Her students researched species found in marshlands and described them by writing two-voice poems. We have included one of their poems here as an excellent example of how students may use poetry to express what they are learning.

Raven, *by Kelli West*

Raven

A magical bird in

Black feathers,

Black feet,

They fly and walk.

They eat

Insects,

young birds,

and other small animals.

They also eat

fruit,

carrion,

grains,

Females lay three to six

NEW BIRTH!



Raven

myths and legends

a purple luster,

and a black beak.

They fly and walk.

They eat

worms,

frogs

and other small animals.

They also eat

grains,

fruit,

carrion.

spotted eggs which means

NEW BIRTH!

May The Forest Be With You!

"Trees for Wildlife"

"Trees for Wildlife," a recent publication for the Friends of Tree City USA by the National Arbor Foundation, is a concise presentation of the basic principles involved when you're planning to attract wildlife to your school, home or community. "Trees for Wildlife" emphasizes the basic components of habitat, describes useful vegetation patterns and supports the value of retaining old snag trees. Also included is a list of several excellent references about attracting wildlife.

We have purchased a limited supply of this leaflet for your use. Please contact the Project WILD Office, 1596 West North Temple, Salt Lake City, UT 84116 (538-4720) if you would like a copy.

TreeUtah

TreeUtah is a non-profit organization dedicated to the planting and care of trees in and around the population centers of the state. Major goals are:

- Plant 100,000 trees by 1996 for Utah's statehood centennial;
- Foster civic pride and heighten public awareness of the value of trees. TreeUtah will promote tree stewardship to maximize the survival rate of trees;
- By the year 2000, plant 2 million trees statewide.

For more information, write TreeUtah, P.O. Box 11506, Salt Lake City, UT 84147 or call John Cummins at 801 237-2015.

Did You Know...?

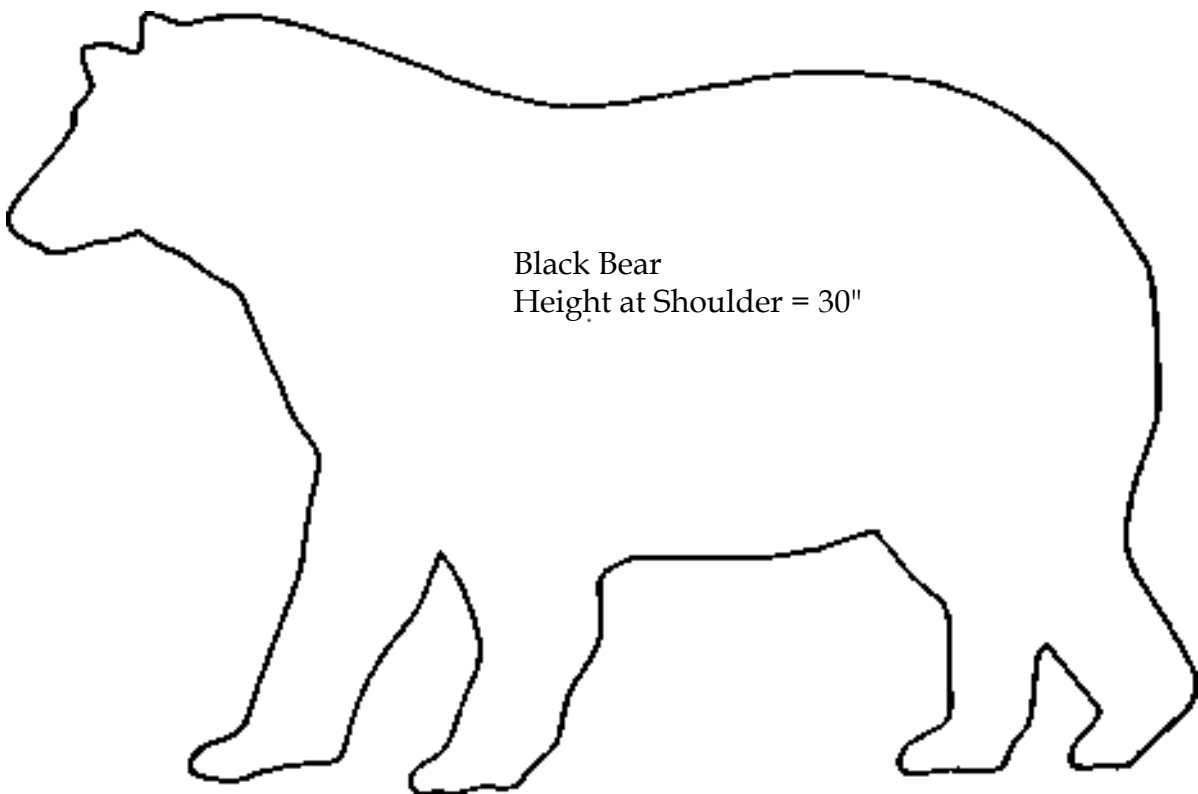
- § A Baltimore oriole can consume 17 hairy caterpillars in a minute.
- § A house wren feeds 500 insects to its young every summer afternoon.
- § A pair of flickers considers 5000 ants a mere snack.
- § A swallow can devour 1000 insects every 12 hours.
- § A brown thrasher has been known to eat 6180 insects in one day.
- § A pair of scarlet tanagers have been seen to eat 630 newly hatched caterpillars of the gypsy moth in 18 minutes.

Source: The Garden Club of America from "Trees for Wildlife"

Black Bears are the Bears of the Forest

To accompany the Project WILD activities BEARLY BORN, WHICH BEAR GOES WHERE? and HOW MANY BEARS CAN LIVE IN THIS FOREST?, we have adapted a project from a WILD teacher in Arizona -- and now you, too, can build a black bear den right in your classroom, following step-by-step directions! Contact the Project WILD Office, 1596 West North Temple, Salt Lake City, UT 84116 (801 538-4719) for a copy of this handout. And don't forget to use the information on the black bear from the Utah Wildlife Photo Series (available for \$10 from the Project WILD Office) when teaching about these solitary bears of the forest.

Since it's also interesting for students to understand just how big a black bear is, we're reprinting below a silhouette of the black bear from which it's easy to make an overhead transparency. From the projected image, students can easily trace life-size figures on butcher paper. We also have available silhouettes of a grizzly bear and a polar bear, thanks to Arizona Game and Fish Department.



Utah Wildlife Viewing Guide

(Now available for a \$5.95 contribution at bookstores and DWR Offices. Can be obtained by mail by sending \$5.95 plus \$.50 postage to the Fiscal Management Section, Division of Wildlife Resources, 1596 West North Temple, Salt Lake City, UT 84116.)

If the long-tailed weasel on the cover of the Utah Wildlife Viewing Guide doesn't visit your school or yard on a regular basis, then you may have to search it out in its own habitat to catch a glimpse of it. And, according to this newly published guide, Fish Springs National Wildlife Refuge is one spot where you might see the long-tailed weasel as well as some other small mammals, birds of prey, songbirds, waterfowl, shorebirds and wading birds. Developed by a variety of state and federal agencies in cooperation with Defenders of Wildlife, the Utah Wildlife Viewing Guide identifies ninety-two of the best and most easily accessible wildlife viewing sites in Utah.

These sites will most often be identified on the road by highway signs showing a binoculars logo or have the words "Wildlife Viewing Area" with an arrow pointing toward the site. The binoculars logo has become symbolic of wildlife viewing sites across the nation.

This book has been developed to increase public awareness and appreciation for wildlife and their habitat. Wildlife featured in this guide include carnivores, hoofed mammals, small mammals, freshwater mammals, waterfowl, upland birds, songbirds, birds of prey, fish, reptiles and amphibians, shorebirds, and wading birds. The sites in the Utah Wildlife Viewing Guide are categorized into nine separate regions, and each region is accompanied by a detailed map.

"Getting to Know Wildland Fire"

All of us are aware of the fires that burned throughout Utah this past summer. As educators, we can teach about fire in a variety of subject areas. Project WILD specifically addresses fire in SMOKEY THE BEAR SAID WHAT? (Elementary Guide) and FIRE ECOLOGIES (Secondary Guide).

Now, thanks to Ellen Petrick-Underwood and Joe Zarki, we have available for all Project WILD teachers a newly developed Teacher's Guide to fire ecology in the northern Rocky Mountains. This booklet of eight activities was written by Ellen, who many of you know as part of the Project WILD team here in Utah during the winter and who works as a Ranger/Naturalist in Yellowstone National Park during the summer.

This project, "Getting to Know Wildland Fire," was developed as a direct result of the Yellowstone fires of 1988. Some activities relate directly to the Yellowstone ecosystem, but many activities can be completed in any educational setting or adapted to specific burned areas outside Yellowstone National Park. We have reprinted one activity handout for you, adapting it slightly for Utah habitats.

The format of each activity is much like the format of Project WILD activities. One activity, "Cycles Behind the Scene," is particularly effective when used with OH DEER! to emphasize the cyclic nature of natural changes. The role of fire as an incredibly forceful limiting factor can, of course, be taught whenever you're teaching about habitat and wildlife populations affected by fire.

Special thanks to Joe Zarki, Division of Interpretation for Yellowstone National Park, for providing us with these guides. **The Teacher's Guide and a colorful companion poster, "Fire's Role in Nature," can be requested from the Project WILD Office.**

Burned Area Scavenger Hunt Checklist

(reprinted from "Getting to Know Wildland Fire," a school outreach project of the National Park Service and the U.S. Forest Service)

Burned areas can be exciting places to explore, but they can also be dangerous places! Never enter a burned area on a windy day, and always watch for falling trees!

See how many of the following things you can find in a burned forest! Check them off as you find them.

1. ____ Find a nesting cavity in a burned tree.
2. ____ Find a serotinous cone if you're in an area with lodgepole pines.
3. ____ Find a pine seedling or a seedling from a spruce or fir tree.
4. ____ Find an aspen or oak sprout.
5. ____ Find animal tracks. Draw them here.

6. ____ Find animal scat. Draw it here.

7. ____ Find evidence of browsing.
8. ____ Find the hole of an animal that lives underground.
9. ____ Find a tree that burned, but did not die.
10. ____ Find evidence of a bird looking for insects under the bark of a burned tree.
11. ____ Find a trunk that burned more at the base than higher up the trunk.
12. ____ Find evidence of a fallen tree that burned completely.
13. ____ Find evidence of a stump that burned out completely, leaving empty tunnels in place of its roots.
14. ____ Find a wildflower or the leaves of a plant you think might flower at some time. Draw the flower or leaf on the back of this page.

Growing WILD, Utah's Project WILD Newsletter
Written and edited by Brenda Schussman
Illustrated by Ellen Petrick-Underwood
Printed on recycled paper



There is a place where the sidewalk ends
And before the street begins,
And there the grass grows soft and white,
And there the sun burns crimson bright,
And there the moon-bird rests from his flight
To cool in the peppermint wind.

~ Shel Silverstein, from
"Where the Sidewalk Ends"

